PREVENTION OF CHOLERA:

BEING THE SUBSTANCE OF A LETTER

TO

THE CHAIRMAN OF THE BOARD OF GUARDIANS OF THE SHEFFIELD UNION,

BY

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PUBLISHED BY SPECIAL REQUEST OF THE BOARD.

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THIRD EDITION, ENLARGED.

FOURTH THOUSAND.

"He spoke to deaf ears: the many were too ignorant or too feeble; the few too idle or selfish to heed the word; so after the warning came the pestilence, and then the lamentation, the fasting, and the prayer."

THEODORE PARKER. et and the state of the state o

> LONDON: LONGMAN AND CO. SHEFFIELD: J. PEARCE, JUN., HIGH-STREET.

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PREFACE TO THE THIRD EDITION.

In a few days several editions of this little work have been sold, which proves how fully alive the great body of the people are becoming to the absolute necessity of sanitary measures, for the removal of those causes which at present exert so baneful an influence on the lives of thousands of the inhabitants of our cities, towns, and villages. Since these remarks were first addressed to the Chairman of the Sheffield Board of Guardians, and published at the special request of the Board, certain lengthy directions have been issued from the authorities in London, not materially differing from those already given by myself. I must take this opportunity of expressing to the Guardians my warmest thanks for the prompt manner in which my suggestions have been adopted.

In every town in this kingdom, the chief localities of disease and death are the narrow courts and lanes inhabited by the poor—the districts thus unhealthy in London and our larger towns are well known; the effects of the causes there permitted to exist are known also; it is known as certainly as the large red cross on the door, and over it the words "Lord have mercy upon us," in the days of the Plague, denoted that house to be visited by the pestilence, that in all densely-crowded neighbourhoods where the streets are dirty, narrow, and badly drained, the houses without the means for ventilation, cleanliness, or decency; there will be found those diseases, which spread from such abodes to the more favoured habitations of the wealthy—here are the congenial abodes of drunkenness, idleness, profligacy, and crime ! here recruits are daily trained, not only for the workhouse and the hospital, but also for the gaol and the gallows—for filth, destitution, and crime herd together, they are naturally congenial and inseparable companions.

It is, therefore, manifestly the duty of the authorities in every town to put a stop to this fearful state of things; humanity, justice, the safety of the commonwealth,—the duty we owe to ourselves, our neighbours, and our God, alike demand that such evils be no longer permitted to exist.

Surrey-street, Sheffield, Sept. 28, 1853.

LETTER.

SIR,

AT such a time as this, when our country is visited by Malignant Cholera, I venture to address you in your official capacity; and perhaps, after having for nearly twenty years devoted a considerable portion of my time to a consideration of those causes which increase the Bills of Mortality and seriously affect the Health of Towns; after having had the honour of preparing for the Government of Lord Morpeth a portion of that statement which his lordship placed before the House of Commons on introducing the Health of Towns Bill; and after having, on the visitation of the Cholera in 1847 and also at the present time, had the preparation for "The Times" of a series of articles on the prevention of Cholera, I hope I shall not be considered presumptuous in doing so. If any precedent were required for taking this step, it has been supplied by a letter addressed to the public authorities of Newcastle, by one of the leading physicians of that town.*

My object in addressing you, Sir, and through you the other Members of the Boards of Guardians throughout England, is to consider how we may best guard against the danger now hanging over us.

Although the fact that Malignant Cholera has again reached our shores cannot longer be questioned, as yet the towns of Newcastle and Gateshead have only suffered severely; how long it may be ere the disease reach Sheffield, no human being can tell. A little space may yet be afforded us to take the necessary precautions : if we are wise, Sir, we shall waste no longer the hours which yet are mercifully extended to us, and if we so employ ourselves, although we cannot hope to altogether escape the pestilence, we shall most certainly mitigate its severity, by at once removing those numerous nuisances which I know to exist in every town, and which the Order in Council (putting into force the Act for the Prevention of Epidemic, Endemic, and Contagious

* Dr. G. Robinson, Lecturer on the Practice of Medicine, Newcastle; also, Dr. T. Shapter, Physician to the Devon and Exeter Hospital. Diseases throughout the whole of Great Britain,) dated September 15th, 1853, gives ample powers to accomplish.

In a letter with which I have been favoured by Dr. Sutherland, the Physician to the General Board of Health, he points out the necessity of the authorities in every town at once commencing operations, and he adds, "the great evil committed by Local Authorities the last time arose partly from neglect of prevention while there was time for it, but the worst of all evils arose from thinking that nothing could be done." After urging upon me the importance of insisting upon these things in my next letter to "The Times," the Doctor adds "not a moment should be lost in cleansing towns and linewashing houses. If the people put off doing this, I am warranted by the experience already acquired at Newcastle, in saying the mortality will be frightful." *

The same day I communicated this advice to the Mayor, who, in the course of an hour called upon me, most kindly listened to my suggestions, and with his usual promptitude, ordered the police to attend to some of them. He also thought I should at once communicate with you.

The old haunts of the Cholera in every town are well known; and from what is taking place at Newcastle it will in all probability again walk in the same courts and lanes we saw it in for the most part before. In at once commencing the cleansing of them, some precautions must be taken, for in removing heaps of filth and night soil, great care should be used to prevent the extrication of large quantities of poisonous gases, which always exist in accumulations of animal and vegetable remains. Such removals should always take place between the hours of twelve at night and eight in the morning. Certain metallic saltsfor example, green and blue copperas, chloride of zinc, nitrate of lead, and chloride of lime-have been used at Newcastle for this purpose. Chlorine is, however, in my opinion, far the best for this object. It is cheap, can be prepared in a short time, and is highly efficacious. It is obtained by mixing the black oxide of manganese with common salt, and pouring upon it the oil of vitriol and water † This should be poured upon heaps of filth before their removal, and also used in the cleansing of privies, the evils arising from which just now are very great, and

* From the 31st of August to the 18th of September, 1853, the appalling number of 557 have died at Newcastle from Cholera and Diarrhœa; (in 1832, in the same number of days, only 91)—no class has escaped the pestilence —all ranks have died !!—As the third edition of this pamphlet is passing through the press, I find the deaths exceed one thousaud.

+ Common salt three parts, manganese one part; add sulphuric acid and water in equal proportions, sufficient to form the mixture into the consistence of cream, which must frequently be stirred with a stick. will demand immediate attention. Chloride of lime is also very useful. Another evil must also at once be attended to : I allude to the grates in the different parts of every street connected with the sewers; they are generally without "traps," and the stench arising from many of them most disgusting.

In almost every town a visit to many of the courts and back lanes will prove their condition to be most wretched, the houses very filthy, and the privies disgusting. The lime-washing of these houses, and the washing out from time to time of the courts and lanes either with the fire-engine, or with a gutta percha pipe attached to the water mains, will be found most useful. It has been resorted to at Newcastle with the best results.

It is hardly necessary to suggest that the greatest care should be taken to inspect provisions of every kind brought into our various markets, and that the sale of such as may be found unfit for human food should at once be prohibited.

PIGS, when kept in styes near the abodes of the living, are often a great nuisance, one that will require the attention of the Inspector. The same remark will apply to BUTCHER'S SHOPS and SLAUGHTER HOUSES. The practice of throwing the entrails of sheep and pigs into ash-holes behind dwelling-houses is highly improper, at all times injurious to the health of the inhabitants, and ought not to be permitted.

Should the Cholera attack the inhabitants of Sheffield, and take the same course it has taken at Newcastle, it will generally be ushered in by an attack of diarrhœa, which, if attended to in time, may generally be cured. One of the last reports made to the Board of Guardians at Newcastle shews that, even violent as diarrhœa is there, of 300 cases treated as soon as discovered, only eight ran on to collapse. In the letter of Dr. Sutherland before me, he says "on the last visitation, Sheffield had 5319 epidemic cases, but such was the efficiency of the preventive measures, that not one of these fell into collapse or died. All I can say is, I should be very well satisfied with such a result anywhere, and I shall be glad if you can induce the authorities to renew their exertions now."

It cannot be too generally known that the Cholera is promoted by dirt, by drunkenness, by slothfulness, and the fear these debilitating influences create; that the best antidotes are pure air, cleanliness of person, of house, and of premises, and TEMPERANCE 1!

Our dangers will not be increased, by at once fairly looking them in the face; on the contrary, THE WAY TO AVOID DANGER IS AT ONCE TO MEET IT; at once to supply the machinery by which existing nuisances may be swept away, and by providing stations where the poor can obtain proper medical assistance and medicines, on the first attack of diarrhœa. To remain in our present condition until Cholera attack us would be almost criminal: we may yet have time to prevent much of the mortality that attends it; for we are at length fully aware that Cholera will not prevail as an epidemic—will not decimate a population will not break out at one hundred parts of the same town unless the local sources of atmospheric pollution and bodily disorders exist to abundantly supply the pabulum requisite to its existence, and although so long as these depressing agents continue, the pestilence will remain, the removal of them removes also the predisposition to pestilence.

Bear in mind that our means for self preservation, and the preservation of others, are two-fold. Firstly, the removal of all those local influences which favour the existence of diseases, and the prevention of their recurrence; and this must be done by generally improving, in every town, the condition of the districts known to be unfavourable to health. Where Cholera has once been, unless causes favourable to its localization have been taken away, there it will come again, so surely as, summer after summer, the swallow returns to the old nest which it has occupied before. The home of the Cholera, too, is the abode, year after year, of Measles, Scarlet Fever, and Typhus-Fever of the most malignant kind : by cleansing, and keeping cleansed such places, we certainly render them less liable to be visited by Cholera, and, even should it not attack severely the inhabitants of a town (as most probably it will not,) where these precautions have been taken, let no one venture to decry these active measures, or sneeringly insinuate they could not have been required; for we shall, by rooting out every nuisance, have rendered such courts and lanes less liable to yearly visitations of fever. And if we look at the question of sanitary improvement, even in a pounds, shillings, and pence light, much pecuniary benefit will be seen to arise; for, many additional demands are made on the rate-payers for the support of the widows and orphans of those who have died from Typhus-fever; for, after all, the FEVER TAX is not the least of the heavy annual demands on the poor rates of this country.*

It must at length be admitted, to be perfectly true, as pointed out by "The Lancet," that the word "Asiatic" can no longer be pre-fixed to the disease known as Cholera. Cholera first attacked the inhabitants of this country in 1832; again visited us after an interval of about fifteen years, in 1848; in 1853 it has again appeared, attended, especially at Newcastle, by a mortality perfectly

* A few years ago, the result of a careful calculation showed in the different Unions, 27,000 cases of Widowhood, and 100,000 cases of Orphanage, the result of causes capable of prevention.

appalling. It isidle, therefore, longer to talk of Cholera as a disease peculiar to the East; it is also, most certainly, European, and what concerns us the most, must now be regarded as one of those diseases to which the people of England are at any time liable. And yet, if we cannot altogether get rid of the evil, happily for us the power is afforded of cutting off, to a considerable extent, the supplies by which it is created and supported : but vain are all our hopes, so long as the presence of the pestilence continues to be invited, by over-crowded grave-yards, surrounded by houses, in the centre of the most populous of our towns-accumulated filth-soils reeking with sewerage, and rivers polluted with every conceivable abomination. And here, I must repeat, what for many years I have again and again urged, that effectual means to cleanse and purify our towns are not to be taken, only when we expect a visitation from Cholera: our measures of sanitary improvement ought ever to be anticipative and preventive : all our machinery ought, week after week, month after month, year after year, to be in active operation: when pestilence appears, and not till then, to commence the long neglected work of purification, without the greatest possible care, and active medical supervision, more harm than good may possibly be done; such measures at all times require care, but the precautions should be far greater when pestilence is impending.

The history of the Plague, which the great fire of London banished from the metropolis, by burning the dwellings in which the pestilence had so long found food, and a congenial home; the observations of Clot Bey and Aubert prove the Plague to be increased, if not created by locality, and the same facts are admitted with regard to the Cholera. Are these facts generally known? if known, why are they not attended to? Why has the Cholera at this moment, breaking out in this land of wealth and civilization, found us almost destitute of sanitary regulations; why are the poor in the back streets of our towns and cities, still left amid filth and misery, as so many baits to invite the presence of Cholera and fever? If still these warnings remain unheeded—if still they are addressed to deaf ears; if the many still remain too ignorant or feeble-the few, too idle or selfish to heed them, rest satisfied the pestilence will most certainly visit us, to be followed, as before, by lamentation, fasting, and prayer. At present a duty devolves upon all; let each man prepare for exertion: as the head of a family, let each man strive to make his house, and the street in which it stands, as healthy as possible; let him invite his neighbours to assist; let him urge the local authorities to activity; in a word, let him labour to do his duty in that station of life into which it has pleased God to call him.

Attention has now been drawn to some of the leading measures of a general preventive nature, more fully set forth at the 8th page, under the head, "Prevention of Cholera." But, secondly, the question may be put to me, as a physician, by any one, what prophylactic * measures ought I to take? such a one must be referred to the Appendix, page 11; suffice it here to repeat, that any mental or physical depression is to be avoided as predisposing to disease, and that every one should adopt that course of life, which experience has proved to him most conducive to vigorous health.

I am afraid we have yet to set about the greater portion of these important sanitary measures, and can only regret more urgent demands on my time do not enable me to deal with the subject in a way its importance requires; still, if these remarks are not of any great service, I trust they may, by calling attention to some of the circumstances which exercise the most powerful influence in maintaining the epidemic constitution of the atmosphere of towns not be altogether destitute of utility.

It is not without feelings of anxiety that a *new* edition of this pamphlet is placed before the public, not so much on my own account as from a fear that the principles so earnestly sought to be established may have suffered from inefficient advocacy. Still those fears do not altogether check the aspirations of hope; because, whatever directs to the miserable condition of thousands of our fellow-creatures—to the ravages caused by numberless deaths and cases of sickness, the result of causes which can be prevented, has an immediate and certain tendency to point out the means by which many social evils may be destroyed, the more so when it becomes known that the sources of pestilence (the sewerage of towns) may be converted into streams of plenty.

There are many other topics that suggest themselves. I venture not, however, to trespass at greater length; and, therefore, give the following brief résumé of what experience seems to suggest as necessary to be done by the authorities, on the present threatened visitation of malignant Cholera.

^{* &}quot;An extra quantity of common table Salt is strongly advised to be taken with each meal, in the Lancet of last Saturday."

PREVENTION OF CHOLERA.*

WORK TO BE DONE BY THE AUTHORITIES.

1. The immediate removal of all nuisances, from whatever cause arising. Privies, ash-pits, cess-pools, and house drains, sewers, pigs, slaughter-houses, &c. &c. &c. Great care being taken in doing so.

2. The washing out, as often as necessary, with the fire-engine, of back courts, lanes, &c. By an arrangement with the Water Company, in many cases, the cost of the fire-engines could be saved : the water being now supplied at a sufficiently high pressure.

3. A house-to-house visitation, to ascertain the health of the inhabitants, to treat cases of Bowel Complaint as soon as they arise, to cleanse and to lime-wash such houses as are dirty, and the courts in which they are built.

4. To establish stations where the poor may by night, or by day, be supplied with proper medicines and medical attendance.

5. The nightly visitation of all the lodging-houses in the town, to see that the rooms are not over crowded; to see that they are lime-washed; and to see also, that tramps coming from Newcastle or other towns where Cholera is severe, are not labouring under Diarrhœa.

6. To see that all the grates in the town have proper traps.

7. That printed papers be left generally at houses, giving simple directions for the preservation of health; the lime-washing of houses; cleanliness—ventilation of lodging-rooms; pointing out the very great importance of temperance, and requesting that immediate notice be given of any nuisance. +

8. Inspection of provisions.

9. Water supply to the houses of the poor.

10. Burial Grounds to be closed, if necessary. Graves to be made of a sufficient depth.

11. Supply of food, coals, &c. to widows and the very destitute, in the worst localities.

12 To provide a Cholera Hospital, and Houses of Refuge to which removals should be made, from over-crowded houses, of those thought to be in danger; nurses being sent to attend on those labouring under the complaint.

To prove the advantages of removal from crowded localities to well ventilated houses, or tents outside the town, reference may be made to a well known fact, not mentioned in the *First Edition* of this Pamphlet; in 1849 the Cholera made its appearance at Mevagissey, a small town in Cornwall, rich in every appliance for

* + See Appendix.

the propagation of pestilence. A healthy spot was selected, at some distance from the town, and a well ventilated camp formed, to which a large portion of the inhabitants of this filthy town was removed. At the camp not one person was attacked with Cholera, but 126 cases afterwards occurred amongst those that remained in the place. The truth at first so graphically described by John Hunter, and now universally admitted, should, at this time, be kept in mind by our public authorities, that in epidemic diseases the morbid poison is increased by crowding human beings together: remove the persons exposed, and you not only accomplish the grand object of providing for the safety of those you remove, but you, also, increase the prospect of security to those left behind.

Such, Sir, appear to me some of the points to which your attention should be especially directed. We have at our command LIGHT! AIR! WATER! three great and powerful sanitary agents—agents all sufficient for the preservation of health and the removal of disease.

And would that, through you, I could advise the masses of my fellow countrymen to remember the importance of the most strict temperance both in eating and in drinking : in this moment of threatened danger let no one seek consolation or courage in a dram, or resort to the bottle, or the beer-barrel as an antidote to fear. Intemperance always enfeebles the constitution, and the broken down in constitution ever supply a majority of the victims of pestilence. During the last visitation, the greatest number of cases of Diarrhœa were reported on the Sunday and Monday.

I trust the inhabitants of each town will become convinced of the importance, not only of at once providing the means by which existing nuisances may be removed, but of preventing their recurrence, for, by so doing, we shall improve the health, prolong the lives, and increase the happiness of all classes.

In this good work I shall, at all times, be most truly happy to assist you; and, whatever the toil, whatever the sacrifice, whatever the dangers of actual daily contact with the dying and the dead, they will be cheerfully encountered, not only by myself, but I venture to add, also, by every member of that profession to which I have the honour to belong.

I have the honour to be, Sir,

Your very obedient Servant,

JOHN CHARLES HALL, M.D.

Surrey Street, Sheffield, Sept. 15, 1853.

To the Chairman of the Board of Guardians of the Sheffield Union.

APPENDIX.

" A people who can understand and act upon the counsels which God has given it, is safe in the most daugerous crisis of its fate."—Guizot.

HINTS FOR THE PREVENTION OF CHOLERA.

Attention is earnestly called to the following suggestions for the Prevention of Cholera, compiled from recommendations made from time to time by the most experienced Physicians and Surgeons of the age :---

I.-INJURIOUS FOOD.

Avoid the use of unwholesome food, particularly Meat that is at all tainted; Stale Fish, more especially Shell Fish; Raw Vegetables; Sour unripe Fruit; Acid Drinks; and Cold Water when the body is heated.

II.—INTEMPERANCE.

Do not become intoxicated. Avoid any intemperate use of Spirits, Wines, Beer, or Porter.

III.—BAD HABITS.

Avoid over Fatigue, Late Hours, Crowded Assemblies, and all habits which depress the Powers of the Constitution.

IV.—PURGATIVE MEDICINES.

Avoid the unadvised use of Salts, Senna, or other Purgative Medicines.

V.-CLEANLINESS.

Cleanse and lime-wash your houses and outbuildings. Remove all Animals, such as Pigs, Poultry, Rabbits, &c., from your yards. Never permit Stagnant Water or Filth of any kind to collect near your dwellings. Attend to the Drains of your house, and wash them down night and morning even when well trapped. Should an offensive odour arise, examine the trap, and as soon as possible remove the cause. Take care that the Street Drains near your house are in a proper condition, and the Street kept clean. Never throw offensive matters into the Street. Be very particular as to the Cleanliness of your Person; Sponge the body daily with cold water, and use a coarse cloth or flesh brush afterwards.

VI.-VENTILATION.

During the day admit Air freely into every room of your house. See that the SHOP in which many of you are working together is well Ventilated. BED ROOM:—Admit Air by nightalso, particularly if many sleep in the same room. Avoid the over-crowding of Bed Rooms. Expose the Bed freely to the Air during the day. Remove Chimney Boards and all obstructions to the free passage of Air. By taking a brick from over the fireplace near the ceiling, and placing a bit of thin silk over the hole, to keep out the soot; or by taking out one of the upper panes of glass, and substituting ribs of glass in its place, efficient Ventilation will very easily be effected.

VII.-CLOTHING.

Wear such Clothes as will keep the body warm and dry. In cold and damp weather, wear Flannel Belts round the Loins, which experience proves to be highly advantageous. Keep your feet dry.

VIII.-DIET.

Eat good wholesome Food. Meat, Stale-Bread, Rice, Sago, Good Potatoes. Drink, in moderate quantity, Cocoa, Tea, Coffee, Milk.

IX.—PREMONITORY SYMPTOMS OF ASIATIC CHOLERA.

When Cholera is Epidemic, indisposition more or less prevails. Some are attacked with giddiness, prostration of strength, general coldness of the body, faintness. Others, with violent sickness, pains in the bowels, cramps, Diarrhœa. We are now aware that Cholera, if treated in its early stages, may be combated with every hope of success. As all these symptoms are premonitory of an attack, go to bed, apply a mustard plaster to the pit of the stomach, warm water bottles to the feet and spine, and consult at once your own private Medical Attendant, or apply directly to the Medical Station provided by the authorities.

Do not destroy this Paper: if you are indifferent to your health, others may not be so.

J. PEARCE, JUN., PRINTER, 24, HIGH STREET, SHEFFIELD.